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METHOD AND APPARUTUS FOR MULTI-BAND OPTICAL SWITCHING USING MULTI-PUMP PARAMETRIC DEVICES

ABSTRACT OF THE DISCLOSURE

A method of multiple-band switching using a multi-pump fiber parametric switch is demonstrated. The switching architecture combines parametric band amplification, wavelength conversion and selective signal conjugation, enabled by temporal control of at least one pump of the multi-pump parametric device. The switching speed of the present invention is limited by the rise time of the controlled pump(s).